February 4, 2003

RE: GATX Rail Corporation 089-16033-00314

TO: Interested Parties / Applicant

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Registration

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 4-21.5-3-4 (d) this order is effective when it is served. When served by U.S. mail, the order is effective three (3) calendar days from the mailing of this notice pursuant to IC 4-21.5-3-2(e).

If you wish to challenge this decision, IC 4-21.5-3-7 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, **within (18) eighteen days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) the date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for consideration at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosure

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Frank O'Bannon
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.state.in.us/idem

February 4, 2003

Mr. J. Jay Grove
GATX Rail Corporation
500 West Monroe Street
Chicago, Illinois 60661

Re: Registered Construction and Operation Status
089-16033-00314

Dear Mr. Grove:

The application from GATX Rail Corporation, received on May 24, 2002, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that the following emission units, to be located at 4245 Railroad Avenue, East Chicago, Indiana 46312 are classified as registered:

(a) One (1) railcar cleaning process, cleaning a maximum of 140 VOC containing cars per year, exhausting to the atmosphere.

(b) One (1) scrapping process, using propane fired cutting torches and mechanical shears, with a maximum cutting rate of 2.4 cars per hour and processing a maximum of 1,100 cars at this site, exhausting to the atmosphere.

(c) One (1) scrap handling process, processing the scraps from a maximum of 1,100 cars at this site, exhausting to the atmosphere.

(d) Paved and unpaved roads.

The following conditions shall be applicable:

1. Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following:

   (a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

   (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

2. Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), the fugitive particulate matter emissions from this source shall meet the following requirements:

   (a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).

   (b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).

(c) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).

(d) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.

(e) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.

(f) There shall be a zero (0) percent frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.

(g) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).

(h) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.

(i) The PM_{10} emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.

(j) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).

(k) Any facility or operation not specified in 326 IAC 6-1-11.1(d) shall meet a twenty percent (20%), three (3) minute average opacity standard.

The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan submitted on July 24, 2002. A copy of this plan is attached.

Pursuant to 326 IAC 6-1-11.1(e)(4), the source shall keep the following documentation to show compliance with each of its control measures and control practices:

(a) A map or diagram showing the location of all emission sources controlled, including the location, identification, length, and width of roadways.

(b) For each application of water or chemical solution to roadways, the following shall be recorded:

(1) The name and location of the roadway controlled.

(2) Application rate.

(3) Time of each application.

(4) Width of each application.

(5) Identification of each method of application.

(6) Total quantity of water or chemical used for each application.

(7) For each application of chemical solution, the concentration and identity of the chemical.

(8) The material data safety sheets for each chemical.

(c) For application of physical or chemical control agents not covered by 326 IAC 6-1-11.1(e)(4)(B), the following:

(1) The name of the agent.

(2) Location of application.

(3) Application rate.

(4) Total quantity of agent used.

(5) If diluted, percent of concentration.

(6) The material data safety sheets for each chemical.

(d) A log recording incidents when control measures were not used and a statement of explanation.

(e) Copies of all records required by this section shall be submitted to the department within twenty (20) working days of a written request by the department.

Pursuant to 326 IAC 6-1-11.1 (e)(4)(G), a quarterly report shall be submitted, stating the following:

(a) The dates any required control measures were not implemented.

(b) A listing of those control measures.

(c) The reasons that the control measures were not implemented.

(d) Any corrective action taken.

3. Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), the Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

4. Pursuant to 326 IAC 6-3-2, the allowable particulate emissions from the scrapping process and the scrap handling process shall each be limited to 50.2 lbs/hr when the process weight rate is 180,000 lbs/hr.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

5. The maximum number of the VOC containing cars being cleaned at this source is 140 railcars. This is equivalent to VOC emissions of 22.5 tons per year. Therefore, the requirements of 326 IAC 2-7 (Part 70 Program) are not applicable.

Any change or modification which increases the number of the VOC containing cars being cleaned at this source to greater than 140 cars must be approved by the Office of Air Quality before any such change may occur.

6. The maximum number of the railcars being processed at this source is 1,100 railcars. Any change or modification which increases the number of the railcars being processed at this source to greater than 1,100 cars must be approved by the Office of Air Quality before any such change may occur.

This registration is the first air approval issued to this source. The source may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Office of Air Quality that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.5-4(a)(3). The annual notice shall be submitted to:

Compliance Branch
Office of Air Quality
100 North Senate Avenue
P.O. Box 6015
Indianapolis, IN 46206-6015

no later than March 1 of each year, with the annual notice being submitted in the format attached.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Pursuant to Contract No. A305-0-00-36, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Ms. Yu-Lien Chu, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (919) 468-7871 to speak directly to Ms. Chu. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, press 0 and ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Sincerely,

Original Signed by Paul Dubenetzky
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

ERG/YC

cc: File - Lake County
Lake County Health Department
Air Compliance - Rick Massoels
Northernwest Regional Office
Permit Tracking - Sara Cloe
Technical Support and Modeling - Michele Boner
Compliance Branch - Karen Nowak
East Chicago Department of Environmental Management

Registration
Annual Notification

This form should be used to comply with the notification requirements under 326 IAC 2-5.5-4(a)(3).

Company Name:	**GATX Rail Corporation**
Address:	**4245 Railroad Avenue**
City:	**East Chicago, Indiana 46312**
Authorized individual:	**J. Jay Grove**
Phone #:	**(312) 621-8456**
Registration #:	**089-16033-00314**

I hereby certify that GATX Rail Corporation is still in operation and is in compliance with the requirements of Registration 089-16033-00314.

Name (typed):
Title:
Signature:
Date:

DUST CONTROL PLAN

GATX Rail
East Chicago, Indiana Facility

July 24, 2002

GATX Rail has recently commenced scrapping activities at is facility in East Chicago, Indiana, which is located at 4245 Railroad Ave.

The following plan has been implemented to control fugitive dust emissions from the facility:

- Our on-site contractor, Compass Environmental, has purchased a water truck. Compass will continuously spray the ground and scrap piles to ensure that dust formation is suppressed. This procedure has been successful in eliminating the dust problem.

- We have purchased a windsock for the site, and it will be installed along the western boundary of the property near Railroad Avenue.

- Compass is moving all of the scrap material that has been stockpiled along the fence at Railroad Avenue. All of this material will be loaded and removed within approximately two weeks of the date of this plan. Once removed, Compass will no longer stockpile material in this location. Until the material is completely removed, Compass will continue to spray the material with water to ensure that no dust is generated during the loading process.

- Compass has currently trimmed their scrapping operations to one shift that ends at 3:30 p.m. Compass may expand their operations to one 12-hour shift at a later date if required. We will notify IDEM if a change in operations occur.

Indiana Department of Environmental Management
Office of Air Quality
and East Chicago Department of Environmental Management

Technical Support Document (TSD) for a Registration

Source Background and Description

Source Name:	GATX Rail Corporation
Source Location:	4245 Railroad Avenue, East Chicago, Indiana 46312
County:	Lake
SIC Code:	4741
Operation Permit No.:	089-16033-00314
Permit Reviewer:	ERG/YC

The Office of Air Quality (OAQ) has reviewed an application from GATX Rail Corporation relating to the construction and operation of the railcar cleaning and scrapping processes.

Permitted Emission Units and Pollution Control Equipment

There are no permitted facilities at this source.

Unpermitted Emission Units and Pollution Control Equipment

(a) One (1) railcar cleaning process, cleaning a maximum of 140 VOC containing cars per year, exhausting to the atmosphere.

(b) One (1) scrapping process, using propane fired cutting torches and mechanical shears, with a maximum cutting rate of 2.4 cars per hour and processing a maximum of 1,100 cars at this site, exhausting to the atmosphere.

(c) One (1) scrap handling process, processing the scraps from a maximum of 1,100 cars at this site, exhausting the atmosphere.

(d) Paved and unpaved roads.

New Emission Units and Pollution Control Equipment Receiving Prior Approval

There are no new construction activities receiving prior approval in this permit.

Existing Approvals

There are no existing approvals issued to this source.

Note: Several permits were issued to General American Transportation (Plant ID #089-00314), which was located at the same location, for railcar cleaning and repairing operations. However, this plant was officially closed on March 26, 2001 and the Title V permit application was withdrawn on September 14, 2001. Therefore, the new activities at this location are considered a new source and a new source review is required.

Enforcement Issue

(a) IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled *Unpermitted Emission Units and Pollution Control Equipment.*

(b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on May 24, 2002, with additional information received on June 25, 2002, July 8, 2002, July 10, 2002, August 5, 2002, August 19, 2002, September 19, 2002, September 23, 2002, September 25, 2002, and November 13, 2002.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (pages 1 through 5).

Note: GATX Rail Corporation started construction and operation in East Chicago Service Center in June 2002. The source stated that this railcar cleaning project will be complete in one year and the site will be closed again after this cleaning project is done.

In the meeting with GATX Rail Corporation on September 24, 2002, IDEM determined that the potential to emit from the this project should be calculated based on the total number of the railcars processed at this site in the worst case scenario. The total VOC containing railcars was estimated at the time to be 123 cars and the total number of railcars to be processed was estimated to be 800 cars in this project.

On November 13, 2002, the source stated that the actual VOC containing railcars processed at this site will be no more than 140 cars and the maximum total cars processed will be no more than 1,100 cars at this site. Therefore, the potential to emit VOC from the railcar cleaning process is calculated based on 140 cars per year and the potential to emit from other processes at this site is calculated based on 1,100 cars per year.

Potential To Emit of Source Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	13.2
PM-10	12.8
SO_2	0.01
VOC	22.5
CO	0.01
NO_x	0.10

HAP's	Potential To Emit (tons/year)
TOTAL	negligible

(a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of VOC is less than 25 tons per year and the potential to emit all other criteria pollutants is less than 100 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

(b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of criteria pollutants is less than 25 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-6.1.

(c) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of pollutants is greater than levels listed in 326 IAC 2-1.1-3(d)(1), therefore the source is subject to the provisions of 326 IAC 2-5.5-1.

(d) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-1.1-1(16)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

(e) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

County Attainment Status

The source is located in Lake County.

Pollutant	Status
PM-10	Moderate Nonattainment
SO_2	Primary Nonattainment
NO_2	Attainment
Ozone	Severe Nonattainment
CO	Maintenance Attainment
Lead	Attainment

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Lake County has been designated as severe nonattainment for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

(b) Lake County has been designated as nonattainment for PM10 and SO_2. Therefore, PM10 and SO_2 emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

(c) Lake County has been classified as attainment for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(d) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2, 40 CFR 52.21, or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate

matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

New Source PSD and Emission Offset Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	13.2
PM10	12.8
SO_2	0.01
VOC	22.5
CO	0.01
NO_x	0.10
Single HAP	Negligible
Combination HAPs	Negligible

(a) This new source is not a major stationary source because no nonattainment pollutant is not emitted at a rate of 100 tons per year or greater. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

(b) This new source is not a PSD major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

(a) each criteria pollutant is less than 100 tons per year,

(b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and

(c) any combination of HAPs is less than 25 tons/year.

This is the first air approval issued to this source.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

This source was constructed in 2002 and is not in 1 of the 28 source categories defined in 326 IAC 2-2-1(p)(1). The potential to emit of each of the attainment pollutants (PM, CO, and NO_x)

before control is less than two hundred and fifty (250) tons per year. Therefore, the requirements of 326 IAC 2-2 are not applicable.

326 IAC 2-3 (Emission Offset)

This new source is located in Lake County (nonattainment area for Ozone, PM10 and SO_2) and has potential to emit VOC less than 25 tons/yr and potential to emit PM10 and SO_2 less than 100 tons/yr. Therefore, the requirements of 326 IAC 2-3 are not applicable.

326 IAC 2-4.1 (New Sources of Hazardous Air Pollutants)

The source was constructed after July 27, 1997. However, the potential to emit HAPs from the entire source is less than the major source thresholds. Therefore, the requirements of 326 IAC 2-4.1 are not applicable.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit VOC more than ten (10) tons per year. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity for sources located in Lake County shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of twenty percent (20%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 6-1-10 (Lake County PM_{10} Emission Requirements)

This source is not subject to 326 IAC 6-1-10 (Lake County PM_{10} Emission Requirements) because it is not a source that is specifically listed in this rule.

326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements)

This source is located in Lake County and has potential to emit fugitive particulate matter from the scrap handling process greater than 5 tons per year. Pursuant to 326 IAC 6-1-11.1, the fugitive particulate matter emissions from this source shall meet the following requirements:

(a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).

(b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).

(c) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).

(d) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.

(e) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.

(f) There shall be a zero (0) percent frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.

(g) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).

(h) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.

(i) The PM_{10} emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.

(j) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).

(k) Any facility or operation not specified in 326 IAC 6-1-11.1(d) shall meet a twenty percent (20%), three (3) minute average opacity standard.

The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan submitted on July 24, 2002.

Pursuant to 326 IAC 6-1-11.1(e)(4), the source shall keep the following documentation to show compliance with each of its control measures and control practices:

(a) A map or diagram showing the location of all emission sources controlled, including the location, identification, length, and width of roadways.

(b) For each application of water or chemical solution to roadways, the following shall be recorded:

(1) The name and location of the roadway controlled.

(2) Application rate.

(3) Time of each application.

(4) Width of each application.

(5) Identification of each method of application.

(6) Total quantity of water or chemical used for each application.

(7) For each application of chemical solution, the concentration and identity of the chemical.

(8) The material data safety sheets for each chemical.

(c) For application of physical or chemical control agents not covered by 326 IAC 6-1-11.1(e)(4)(B), the following:

(1) The name of the agent.

(2) Location of application.

(3) Application rate.

(4) Total quantity of agent used.

(5) If diluted, percent of concentration.

(6) The material data safety sheets for each chemical.

(d) A log recording incidents when control measures were not used and a statement of explanation.

(e) Copies of all records required by this section shall be submitted to the department within twenty (20) working days of a written request by the department.

Pursuant to 326 IAC 6-1-11.1 (e)(4)(G), a quarterly report shall be submitted, stating the following:

(a) The dates any required control measures were not implemented.

(b) A listing of those control measures.

(c) The reasons that the control measures were not implemented.

(d) Any corrective action taken.

326 IAC 6-1-11.2 (Lake County Particulate Matter Contingency Measures)

The potential to emit PM10 form the entire source is less than 10 tons per year. Therefore, the requirements of 326 IAC 6-1-11.2 are not applicable.

326 IAC 6-4 (Fugitive Dust Emissions)

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

326 IAC 6-5-1 (Fugitive Particulate Matter Emission Limitations)

This source is located in Lake County and has potential to emit fugitive particulate matter less than 25 tons per year. Therefore, the requirements of 326 IAC 6-5-1 are not applicable.

326 IAC 8-1-6 (New Facilities - General Reduction Requirement)

The cleaning operations at this new source do not have potential VOC emissions equal to or greater than twenty five (25) tons per year. Therefore, the requirements of 326 IAC 8-1-6 are not applicable.

326 IAC 8-7 (Specific VOC Reduction Requirements for Lake, Porter, Clark, and Floyd Counties)

This source is located in Lake County. However, the potential to emit VOC from the entire source is less than 25 tons per year. Therefore, the requirements of 326 IAC 8-7 are not applicable.

326 IAC 6-3-2 (Manufacturing Processes)

The allowable particulate emissions from each of the scrapping process and scrap handling process shall be limited to 50.2 lbs/hr when the process weight rate is 180,000 lbs/hr (75,000 lbs/car x 2.4 car/hr = 180,000 lbs/hr).

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

According to the emission calculations (see Appendix A), the potential to emit PM from the scrapping process and scrap handling process is less than 50.2 lbs/hr each. Therefore, these processes are in compliance with 326 IAC 6-3-2.

Conclusion

The construction and operation of this rail car cleaning and scrapping operations shall be subject to the conditions of the attached proposed Registration 089-16033-00314.

Appendix A: Emission Calculations
VOC Emissions
From the Rail Car Cleaning Process

Company Name: GATX Rail Corporation
Address City IN Zip: 4245 Railroad Avenue, East Chicago, IN
Registration #: 089-16033-00314
Reviewer: ERG/YC
Date: December 11, 2002

Process Descriptions:

Cars Contracted to Clean at This Site:	1100	cars	
*Cars Containing VOC Pollutants:	140	cars	
Max. VOC emissions:	321.27	lbs/car	(provided by the Permittee)
Cleaning Rate:	16	cars/day	(provided by the Contractor - Compass Environmental, Inc.)
Control Equipment:	None		

1. Potential to Emit Before Control:

Potential to Emit VOC (tons/yr) = 321.27 lbs/car x 140 cars/yr x 1 tons/2000 lbs = **22.49 tons/yr**

*Note: In the meeting with GATX on 09/24/02, IDEM has determined that the PTE of VOC is to be calculated based on the total VOC containing railcars which were cleaned at this site. The source stated that a total of 140 VOC containing cars will be cleaned at this site in the worst case senario.

Appendix A: Emission Calculations
PM/PM10 Emissions
From the Railcar Scrapping Process

Company Name: GATX Rail Corporation
Address City IN Zip: 4245 Railroad Avenue, East Chicago, IN
Registration #: 089-16033-00314
Reviewer: ERG/YC
Date: December 11, 2002

Process Descriptions:

If the cost of repairing cars exceeds the economic value of the car, the tank barrel of these cars will be chopped using cutting torches & mechanical shear to 3' x 5' pieces.

*Cars Contracted to Process at This Site:	1100	cars/yr	
Scrapping Rate:	2.4	hrs/car	
Weight of Each Tank:	75,000	lbs/car	
PM/PM10 Emission Factor:	0.45	lbs/car	(provided by source)

*Note: GATX stated that this railcar cleaning project only last for less than one year. In the meeting with GATX on 09/24/02, IDEM has determined that the PTE of the scrapping process should be calculated based on the total number of railcars processed at this site. The source stated that a maximum of 1100 cars will be processed in this project in the worst case senario.

1. Potential to Emit PM/PM10 from the Cutting Process:

Potential to Emit *PM/PM10 (tons/yr) = 0.45 lbs/car x 1100 cars/yr x 1 tons/2000 lbs = **0.25 tons/yr**

*Note: Assume PM emissions equal PM10 emissions.

2. Potential to Emit PM/PM10 from the Propane Combustion Process:

**Total Propane Usage kgals/year	Sulfur Content (gr/100 ft^3)	
14.5	15	(provided by the source for 800 cars)

	Pollutant					
	PM*	PM10*	SO_2	NO_x	VOC	CO
Emission Factor in lb/kgal	0.4	0.4	1.5 *(0.10S)*	14	0.5	1.9
Potential Emission in tons/yr	**0.003**	**0.003**	**0.011**	**0.102**	**0.004**	**0.014**

*PM and PM10 emission factors are condensable and filterable PM10 combined.
** Total Propane Usage (kgals/yr) = 2908 gal / 220 cars x 1100 cars/yr x 1 kgal/1000 gal (provided by the source)

Methodology

1 gallon of propane has a heating value of 91,500 Btu.
All Emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF - 1,000,000 Cubic Feet of Gas

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 kgal/1,000 gal x 1 gal/0.0915 MMBtu
Emission Factors from AP-42, Chapter 1.5-1, SCC #1-03-010-02.(AP-42 Supplement B 10/96)
Emission (tons/yr) = Throughput (kgals/yr) x Emission Factor (lb/kgal)/2,000 lb/ton

3. Total Potential to Emit from the Scrapping Process:

	PM	PM10	SO_2 *(0.10S)*	NO_x	VOC	CO
Potential Emission in tons/yr	**0.25**	**0.25**	**0.01**	**0.10**	**0.004**	**0.01**

Methodology
Total PTE (ton/yr) = PTE of Cutting (tons/yr) + PTE of Combustion (tons/yr)

Appendix A: Emission Calculations
PM/PM10 Emissions
From the Scrap Handling Process

Company Name: GATX Rail Corporation
Address City IN Zip: 4245 Railroad Avenue, East Chicago, IN
Registration #: 089-16033-00314
Reviewer: ERG/YC
Date: December 11, 2002

Process Descriptions:

Fugitive Dust is created when the scraps fall to the ground. For PTE calculations, assume all tanks processed are scrapped.

*Cars Contracted to Process at This Site:	1100	cars	
Weight of Each Tank:	37.5	tons/car	
PM/PM10 Emission Factor:	0.6	lbs/ton	(This emission factor is from AP-42, Table 12.10-7 - Scrap and Charge Handling Process)

*Note: GATX stated that this railcar cleaning project only last for less than one year. In the meeting with GATX on 09/24/02, IDEM has determined that the PTE of the scrapping handling process should be calculated based on the total number of railcars processed at this site. The source stated that a maximum of 1100 cars will be processed in this project in the worst case senario.

1. Potential to Emit from Scrap Handling Process:

***Potential to Emit PM/PM10 (tons/yr)** = 37.5 tons/car x 0.6 lbs/ton x 1100 cars/yr x 1 tons/2000 lbs = **12.38 tons/yr**

*Note: Assume PM emissions equal PM10 emissions.

Appendix A: Emission Calculations
Potential Emissions
From the Unpaved Roads

Company Name: GATX Rail Corporation
Address City IN Zip: 4245 Railroad Avenue, East Chicago, IN
Registration #: 089-16033-00314
Reviewer: ERG/YC
Date: December 11, 2002

1. Emission Factors:

According to AP42, Chapter 13.2.2 - Unpaved Roads, the PM emission factors from the unpaved roads can be estimated from the flollowing equation:

$$E = \frac{k \times (s/12)^a \times (w/3)^b}{(M/0.2)^c}$$

where:

E =	emission factor (lb/vehicle mile traveled)	
s =	surface material silt content (%) =	4.8 %
W =	mean vehicle weight (tons)	
M =	suface material moisture content (%) =	3 %
k =	empirical constants =	10 for PM and 2.6 for PM10
a =	empirical constant =	0.8
b =	empirical constant =	0.5 for PM and 0.4 for PM10
c =	empirical constant =	0.4 for PM and 0.3 for PM10

2. Emissions From the Empty Trucks:

Mean Vehicle weight (W) = 16.75 tons
*Annual Traveled Mileage = 500 feet/trip x 768 trips/yr x 1 mile/5280 feet = 72.7 miles/yr

PM Emission Factor = $\frac{10 \times (4.8/12)^{0.8} \times (25/3)^{0.5}}{(3/0.2)^{0.4}}$ = 3.84 lbs/mile

PM10 Emission Factor = $\frac{2.6 \times (4.8/12)^{0.8} \times (25/3)^{0.4}}{(3/0.2)^{0.3}}$ = 1.10 lbs/mile

Potentail PM Emissions = 3234.2 mile/yr x 4.69 lbs/mile x 1 ton/2000 lbs = **0.14** tons/yr
Potentail PM10 Emissions = 3234.2 mile/yr x 1.29 lbs/mile x 1 ton/2000 lbs = **0.04** tons/yr

3. Emissions From the Loaded Trucks:

Mean Vehicle weight (W) = 39.25 tons
*Annual Traveled Mileage = 1000 feet/trip x 768 trips/yr x 1 mile/5280 feet = 145.5 miles/yr

PM Emission Factor = $\frac{10 \times (4.8/12)^{0.8} \times (7.5/3)^{0.5}}{(3/0.2)^{0.4}}$ = 5.88 lbs/mile

PM10 Emission Factor = $\frac{2.6 \times (4.8/12)^{0.8} \times (7.5/3)^{0.4}}{(3/0.2)^{0.3}}$ = 1.55 lbs/mile

Potentail PM Emissions = 7708.8 mile/yr x 5.14 lbs/mile x 1 ton/2000 lbs = **0.43 tons/yr**
Potentail PM10 Emissions = 7708.8 mile/yr x 1.39 lbs/mile x 1 ton/2000 lbs = **0.11 tons/yr**

4. Total Uncontrolled Emissions:

Potential PM Emissions = 0.14 tons/yr + 0.43 tons/yr = **0.57 tons/yr**
Potential PM10 Emissions = 0.04 tons/yr + 0.11 tons/yr = **0.15 tons/yr**

*Note: Assume 800 railcars/yr are processed at this plant and 0.96 truck/car scrap.
(This information is provided by the source.)

Appendix A: Emission Calculations
Potential Emissions
From the Paved Roads (Fugitive Emissions)

Company Name: GATX Rail Corporation
Address City IN Zip: 4245 Railroad Avenue, East Chicago, IN
Registration #: 089-16033-00314
Reviewer: ERG/YC
Date: December 11, 2002

1. Emission Factors:

According to AP42, Chapter 13.2.1 - Unpaved Roads, the PM emission factors of the paved roads can be estimated from the following equation:

$$E = k \times (sL/2)^{0.65} \times (w/3)^{1.5}$$

where:

E =	emission factor (lb/VMT)		
k =	particle size mulitplier =	0.016 for PM10;	0.082 for PM
sL =	silt content/loading =	0.05	
M =	surface material moisture content (%) =	3 %	

2. Emissions From the Empty Trucks:

Mean Vehicle weight (W) = 16.75 tons
*Annual Traveled Mileage = 300 feet/trip x 768 trips/yr x 1 mile/5280 feet = 43.6 miles/yr

PM Emission Factor = $0.082 \times (0.05/2)^{0.65} \times (43.6/3)1.5$ = = 0.10 lbs/mile

PM10 Emission Factor = $0.016 \times (0.05/2)^{0.65} \times (43.6/3)1.5$ = = 0.02 lbs/mile

Potentail PM Emissions = 43.6 mile/yr x 0.1 lbs/mile x 1 ton/2000 lbs = **0.0021** tons/yr
Potentail PM10 Emissions = 43.6 mile/yr x 0.02 lbs/mile x 1 ton/2000 lbs = **0.0004** tons/yr

3. Emissions From the Loaded Trucks:

Mean Vehicle weight (W) = 39.25 tons
*Annual Traveled Mileage = 3000 feet/trip x 768 trips/yr x 1 mile/5280 feet = 436.4 miles/yr

PM Emission Factor = $0.082 \times (0.05/2)^{0.65} \times (43.6/3)1.5$ = = 0.35 lbs/mile

PM10 Emission Factor = $0.016 \times (0.05/2)^{0.65} \times (43.6/3)1.5$ = = 0.07 lbs/mile

Potentail PM Emissions = 43.6 mile/yr x 0.1 lbs/mile x 1 ton/2000 lbs = **0.0077** tons/yr
Potentail PM10 Emissions = 43.6 mile/yr x 0.02 lbs/mile x 1 ton/2000 lbs = **0.0015** tons/yr

4. Total Uncontrolled Emissions:

Potential PM Emissions = 0.0021 tons/yr + 0.0077 tons/yr = **0.010 tons/yr**
Potential PM10 Emissions = 0.0004 tons/yr + 0.0015 tons/yr = **0.002 tons/yr**

*Note: Assume 800 railcars/yr are processed at this plant and 0.96 truck/car scrap.
(This information is provided by the source.)